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Taxonomy & Inventories

Darwin wasps (Hymenoptera, Ichneumonidae) of the Nature Reserve of Pantalica (Sicily, Italy)

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Abstract

Background

The hymenopteran family Ichneumonidae (also known as Darwin wasps) represents one of the largest families of parasitoid insects. However, faunistic research is needed to fill the gaps in the knowledge of the biodiversity of this group in the Mediterranean area and Italy.

New information

A faunistic survey on Darwin's wasps of the Nature Reserve of Pantalica (Siracusa, Sicily, Italy) is presented. A total of 81 species of ichneumonids belonging to 19 subfamilies were identified. Of these, 42 species are new records for Sicily and nine species are new records for Italy. The subfamilies Adelognathinae and Oxytorinae are reported for the first time in Sicily.

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Misetus obscurus Berthoumieu, 1897 **stat. rev.** (Ichneumoninae, Phaeogenini), originally described as a colour form of *M. oculatus* Wesmael, 1845, is raised to species level, based on both morphological and molecular data.

Keywords

biodiversity, checklist, Ichneumoninae, parasitoids, Phaeogenini, Sicily

Introduction

With over 25,000 known species and an estimated diversity ranging between 60,000 and 100,000 species (Meier et al. 2024), Ichneumonidae (commonly known as Darwin wasps) represent one of the most diverse insect groups (Yu et al. 2016). The Italian fauna of this group comprises more than 2,260 species, although many of the records are fragmented and mostly concentrated in the northern regions of the peninsula (Di Giovanni et al. 2015, Di Giovanni et al. 2025a).

In the most recent checklist of the Italian fauna, Scaramozzino (1995) reports approximately 175 species for Sicily. However, this list lacks several records, many of which are found in little-known or very old papers, such as those by De Stefani Perez (e.g. De Stefani (1895)). In addition to these records, around 140 species have been added to the list since the 1995s' checklist, largely due to some major faunistic contributions (e.g. Pagliano and Scaramozzino (1995), Pagliano (2003), Turrisi et al. (2007), Pagliano (2009), Riedel and Turrisi (2013), Zwakhals and Turrisi (2014)). To date, by integrating historical records, unreported data and new findings, the Darwin wasp fauna of the island comprises about 450 species (Di Giovanni & Dal Pos, unpublished data).

Recent studies have shown (e.g. Di Giovanni et al. (2015), Di Giovanni et al. (2025a), Di Giovanni et al. (2025b)) that a comprehensive inventory of Ichneumonidae in the Italian fauna is still far from complete. In particular, for many of the twenty administrative regions into which Italy is divided, data are scarce or outdated and much of the diversity of the group in the southernmost part of the peninsula and in the major islands (Sardinia, Sicily) remains largely unexplored.

Materials and methods

The records presented in this study derive from a sampling campaign conducted in the Nature Reserve of Pantalica (Syracuse, Italy)(GPS coordinates 37°07'46.95"N, 15°01'10.70"E; altitude 236-244 m a.s.l) This protected area, located between the Anapo and Calcinara Rivers, is of exceptional geological, archaeological and faunal significance. The sampling sites are situated in habitats resembling Mediterranean shrubland, with *Quercus ilex*. The evergreen, thermo-Mediterranean species form a structurally complex vegetation layer that creates shaded microhabitats and contributes

to relatively stable microclimatic conditions. A total of eight sampling events were carried out, using both Malaise and light traps, between 27 April and 21 August 2023, with closer intervals in spring and more widely spaced intervals in summer (sampling dates: 27/04; 05/05; 17/05; 27/05; 17/06; 09/07; 12/08; 21/08). The research is part of a broader project on the arthropod diversity in the Reserve, by the Entomology and Parasitology Lab., Department of Science, Roma Tre University (Rome, Italy).

The species are listed in alphabetical order, by subfamily, genus and species. For each species, the general distribution, occurrence in Italy and notes on morphology are provided. General distribution data follows Taxapad (Yu et al. 2016), supplemented by more recent taxonomic revisions. For the distribution in Italy, only the main bibliographic references are cited, to complement the data from the most recent available checklist (Scaramozzino 1995). The subdivision of Italian territory into North Italy, South Italy, Sicily and Sardinia follows Minelli et al. (1995); "North Italy" and "South Italy" should, therefore, be considered proper nouns (see also Di Giovanni et al. (2025a)).

All collected specimens are preserved in the personal collection of the first author (FDGC, Filippo Di Giovanni Collection, Siena, Italy).

Photographs were taken with a Nikon D5300 digital camera attached to a Leica Z16 APO stereoscope. Images were acquired using StackShoot TM multiple-focus imaging system and stacked in a single in-focus image using Zerene Stacker software (version 1.04). Images of *Orthocentrus protervus* were taken with a Leica Z16 APO microscope, equipped with Leica FLEXACAM C1 camera and processed by LAS Core software.

For *Misetus obscurus*, DNA was extracted using the Wizard® SV Genomic DNA Purification System (Promega, US), following the manufacturer's protocol. Amplification of the mitochondrial DNA fragment Cytochrome Oxidase subunit I (COX1) was performed as described in Badano et al. (2024) using the forward primer LCO1490 and the reverse primer HCO2198 (Folmer et al. 1994). Sequencing was performed at BMR Genomics (Padua, Italy) using the same primers and the Sanger sequencing method on an automated DNA sequencer. Resulting electropherograms were manually inspected with Sequencher 5.4.6 (Gene Codes, US), species identification being achieved with a BLAST strategy through the BOLD System V5 and the NCBI databases. P-distances were calculated in R v.4.5.0 (Team 2025) using the *ape* package (Paradis and Schliep 2018) with the function dist.dna (model = "raw", pairwise.deletion = TRUE).

Checklist of Darwin waps (Ichneumonidae) of the Nature Reserve of Pantalica (Siracusa, Italy)

Subfamily Adelognathinae Thomson, 1888

Genus *Adelognathus* Holmgren, 1857

Adelognathus punctulatus Thomson, 1883

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F5F639C2-7FEE-59ED-9CA1-201023DBBC8F

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 2FDE0A5C-652B-58EA-A393-3CE580D2D267

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Kasparyan 1990, Scaramozzino 1995, Pagliano 2009). This is the first record of the subfamily Adelognathinae and of the species for Sicily.

Subfamily Anomaloninae Viereck, 1918

Tribe Anomalonini Viereck, 1918

Genus *Anomalon* Panzer, 1804

Anomalon cruentatum (Geoffroy, 1785)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 2; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 8DED9C7C-6D3B-509B-B0BF-4036F86146D5

Distribution: Indomalyan; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Tribe Gravenhorstiini Enderlein, 1912

Genus *Agrypon* Förster, 1860

Agrypon delarvatum (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 70081EDF-C411-5ACE-A559-01AF6EC67F61

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Faggioli 1933, Scaramozzino 1995, Pagliano 2009). This is the first record of the species for Sicily.

Subfamily Banchinae Wesmael, 1845

Tribe Atrophini Seyrig, 1932

Genus *Lissonota* Gravehorst, 1829

Lissonota carbunculus Johansson, 2024

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 23; sex: 3 females, 20 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 22FFCB71-F751-52B8-A5BF-7C7AE9A6CB2D

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 2; sex: 2 females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 638D6D50-5A81-5249-93F1-705D807BD386

Diagnosis: Compared to the original description of the species (Johansson 2024), the specimens examined show the following differences: the small central reddish spot on mesoscutum, as well as the reddish-yellow shoulder marks in males, sometimes

lacking; the red margin on metasomal tergites III-IV in females more extensive, with sometimes metasomal tergite IV almost entirely red, except for black spots at the base laterally; meso- and metapleuron in males sometimes almost entirely black.

Distribution: Palaearctic (Western Palaearctic) (Johansson 2024).

Notes: Species described from France and Sardinia (Johansson 2024). This is the first record of the species for Sicily.

Lissonota corsicator Aubert, 1972

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 37C96BBA-9C13-50B3-9BFE-B3C32D95B921

Diagnosis: With respect to the re-description of the species in Johansson (2024), the specimen collected in Sicily is slightly darker, with the hind corner of pronotum black and with the posterior margin on metasomal tergite II narrowly reddish.

Distribution: Palaearctic (Western Palaearctic) (Johansson 2024).

Notes: Species recorded for North Italy, as a subspecies of *Lissonota bicincta* Szépligeti, 1899 (Scaramozzino 1995). This is the first record of the species for Sicily.

Lissonota fuscator Johansson, 2024

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: ED8F82F0-C3A5-5682-8BBF-F7CF5BFDFA36

Diagnosis: Compared to the original description (Johansson 2024), the specimen collected in Sicily has the mid- and hind trochantelli almost entirely reddish-yellow and the hind tibia externally sub-basally and apically reddish-brown.

Distribution: Palaearctic (Western Palaearctic) (Johansson 2024).

Notes: Species described from France, Great Britain and North Italy (Johansson 2024). This is the first record of the species for Sicily.

Lissonota pleuralis Brischke, 1880

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 3; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A1554B4D-21AC-5178-B8D7-0070D894CD97

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: BFA1B58E-DF92-5CE9-821E-8BE06F14E147

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic) (Johansson 2024).

Notes: This is the first record of the species for Italy (Fig. 1).

Figure 1. doi

Lissonota pleuralis Brischke, 1880, female, habitus. Scale bar 1 mm.

Tribe Banchini Wesmael, 1845

Genus *Exetastes* Gravenhorst, 1829

Exetastes adpressorius (Thunberg, 1822)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F.

Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: AF2E4220-91C7-5D62-8A01-3FAE75B2A3A2

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 87B295D4-6949-5BC7-BBE2-E5C317185AF5

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 12C9E63B-3E14-5BBD-B3E9-5B6A34228576

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F6216F7C-0C0C-5EA3-BD49-3F84CB54BF31

e. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 3887B613-5DBD-5E35-81A8-08ECF8CA24D7

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic) (Riedel 2023).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Subfamily Campopleginae Förster, 1869

Genus *Campoletis* Förster, 1869

Campoletis agilis (Holmgren, 1860)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5014D50B-EE81-5C07-A4AF-DC4A3380E0DD

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 5; sex: 1 female, 4 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9A77AA4F-B4D3-5230-BADE-BD86E19E5544

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day:

17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 200E1545-1E6D-5B8C-B26D-A2CD1C907CD7

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C704AC9C-4D4E-5846-80DC-B21786941996

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic) (Riedel 2017).

Notes: Species recorded for North and South Italy (Di Giovanni and Riedel 2017). This is the first record of the species for Sicily.

Campoletis annulata (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 995FB2A6-D06B-5840-BA78-A525866D5A1C

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic) (Riedel 2017).

Notes: Species recorded for North and South Italy (Gribodo 1881, Zangheri 1969) and Sicily (Vidal 1997).

Campoletis latrator (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9ED79705-3492-5687-8F17-D2682441D1F7

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 778850DA-22B4-5926-B783-1888333957C2

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 7; sex: 4 females, 3 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 492B7101-032E-5DEB-94FB-767749C71CCE

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day:

9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: D7A53BD2-40BB-5388-A691-258562004572

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic) (Riedel 2017).

Notes: Species recorded for North and South Italy (Gribodo 1881, Zangheri 1969) and Sicily (De Stefani 1895).

Genus *Cymodusa* Holmgren, 1859

Cymodusa (*Cymodusa*) *australis* (Smits van Burgst, 1913)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 3; sex: 1 female, 2 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 4AB1A395-EB83-56E7-9001-312150804A3A

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 11; sex: 6 females, 5 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 05163467-23B7-52DF-B0E7-2D4BA5973F7E

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 3; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F2F9FC4F-34D3-5B98-AE17-2C98B2F67EB0

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 687E9EB1-7FBE-5A69-8371-C47582DE59F7

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Di Giovanni and Scaramozzino 2019). This is the first record of the species for Sicily.

Genus *Dusona* Cameron, 1901

Dusona erythrogaster (Förster, 1868)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day:

5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: D1AFB1BA-4310-5D58-B123-4CB148866C05

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Pagliano 2009, Horstmann 2011). This is the first record of the species for Sicily.

Genus *Eriborus* Förster, 1869

Eriborus terebrator Aubert, 1960

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: CF942085-22A6-5215-BC49-8DFC2249ABFF

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Di Giovanni and Reshchikov 2016 , Di Giovanni and Scaramozzino 2019). This is the first record of the species for Sicily.

Genus *Nemeritis* Holmgren, 1860

Nemeritis fallax (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & Z. Vas; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 4A326684-AABE-5D68-815B-315CE8604364

Distribution: Palaearctic (Western Palaearctic).

Notes: This is the first record of the species for Italy (Fig. 2).

Figure 2. doi

Nemeritis fallax (Gravenhorst, 1829), female, habitus. Scale bar 1 mm.

Genus *Sinophorus* Förster, 1869

Sinophorus turionum (Ratzeburg, 1844)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: D40DAC5C-6E3E-5D87-ABFE-31D4401FCB86

Distribution: Indomalyan; Nearctic (introduced); Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded in North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Family Cryptinae Kirby, 1837

Tribe Aptesini Smith & Shenefelt, 1955

Genus *Aptesis* Förster, 1850

Aptesis nigrocincta (Gravenhorst, 1815)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 75148A22-40DD-5A68-A598-D65822C41BBE

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: E11E4184-E879-5A26-A074-A79F9931DDC0

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 49A5BDE3-7F5E-5375-8BE2-8EE605D8FA64

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Gribodo 1881, Scaramozzino 1995, Pagliano 2009). This is the first record of the species for Sicily.

Tribe Cryptini Kirby, 1837

Genus *Agrothereutes* Förster, 1850

Agrothereutes hospes (Tschek, 1871)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 431730D6-EA8B-5D5A-96CB-8C0519D735DF

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di

Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 73E88FBF-9866-5960-9B5A-D660A76A44DB

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Agrothereutes pumilus (Kriechbaumer, 1899)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F546D58D-0AA7-51CB-9C48-F87344A99B0C

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North, South Italy and Sardinia (Gupta 1983, Delrio and Prota 1987, Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Enclisis* Townes, 1970

Enclisis infernator (Aubert, 1968)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 04; day: 27; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C86C4B3B-6860-5C2F-B1D9-22BC4E02C87C

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Schwarz 1989, Corcos et al. 2017). This is the first record of the species for Sicily.

Enclisis macilenta (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: D2F45EE9-8D68-5169-B2DA-F921AB2A1F59

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Schwarz 1989) and Sicily (De Stefani 1895).

Enclisis vindex (Tschek, 1871)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 074732A5-FC30-5550-96D4-3C19965353DB

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Corcos et al. 2017). This is the first record of the species for Sicily.

Genus *Hoplocryptus* Thomson, 1873

Hoplocryptus bellosus (Curtis, 1837)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5082ED79-7FB1-561A-9D95-455CF581A08F

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A1B9EA87-8DFF-5BA1-A89F-87E7E4C580A7

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Faggioli 1933, Grandi 1959, Scaramozzino 1995, Schwarz 2007).

Hoplocryptus odoriferator (Dufour & Perris, 1840)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di

Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 6A29CF21-AE1C-58FA-AFE1-78A83905E3D9

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C7E18497-4295-56BC-B5A1-070CA516E757

Distribution: Palaearctic (Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Schwarz 2007).

Genus *Myrmeleonostenus* Uchida, 1936

Myrmeleonostenus italicus (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: DA6C88F0-A4E3-5925-BB80-3CB84CF4432E

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Genus *Schreineria* Schreiner, 1905

Schreineria populnea (Giraud, 1872)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9ED45D78-091E-5B60-9710-F63F518986C3

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A1AEAC94-AF55-589E-AB9B-4ED51B372132

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F.

Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 4E6449E9-6D5A-54E2-B318-0F3F77792AF8

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Stenarella* Szépligeti, 1916

Stenarella domator (Poda, 1761)

Stenarella domator subsp. *domator* (Poda, 1761)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 2721A004-3A0D-5CE7-A4F5-4B9FC93E5B93

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Pelaearctic).

Notes: Recorded for North, South Italy and Sicily (De Stefani 1895, Scaramozzino 1995, Schwarz and Shaw 1998, Santos and Bordera 2025).

Genus *Trychosis* Förster, 1869

Trychosis legator (Thunberg, 1822)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 3; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: EA66DEE4-58B4-5FD8-8A45-00261F380A80

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Pagliano 2009).

Subfamily Ctenopelmatinae Förster, 1869

Tribe Perilissini Thomson, 1883

Genus *Lathrolestes* Förster, 1869

Lathrolestes luteolator (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & A. Reshchikov; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 17743EFC-81E0-54DD-9146-BBC21221D396

Distribution: Australasian; Nearctic; Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Di Giovanni et al. 2015). This is the first record of the species for Sicily.

Genus *Perilissus* Holmgren, 1856

Perilissus sericeus (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & A. Reshchikov; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: E2817E8C-3D7F-5633-BA55-E818B1C91C4C

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995, Pagliano 2009). This is the first record of the species for Sicily.

Subfamily Diplazontinae Viereck, 1918

Genus *Diplazon* Nees, 1819

Diplazon laetatorius (Fabricius, 1781)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 3B393BE5-3383-5C0E-9746-E24D60AA7A5A

Distribution: Worldwide.

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Diplazon pectoratorius (Thunberg, 1822)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 2B2E2312-F764-5CED-94F4-999AF7EF821F

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995) and Sicily (Turrisi et al. 2007).

Genus *Syrphoctonus* Förster, 1869

Syrphoctonus tarsatorius (Panzer, 1809)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 6F3EF181-5A67-5F63-9CEE-985BF308E41E

Distribution: Indomalayan; Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Turrisi et al. 2007, Pagliano 2009).

Genus *Syrphophilus* Dasch, 1964

Syrphophilus bizonarius (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 05; day: 05; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9BCC39D3-03C6-51EF-98A0-207CC3EACC92

Distribution: Indomalayan; Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Horizon: Species present throughout Italy, including the major islands (Scaramozzino 1995, Turrisi et al. 2007, Pagliano 2009).

Subfamily Ichneumoninae Latreille, 1802

Tribe Ichneumonini Latreille, 1802

Genus *Barichneumon* Thomson, 1893

Barichneumon derogator (Wesmael, 1845)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5C1A1471-74D6-5E88-99AA-77305D146CDF

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995) and Sicily (De Stefani 1895, Riedel and Turrisi 2013).

Tribe Phaeogenini Förster, 1869

Genus *Dilleritomus* Aubert, 1979

Dilleritomus apertor Aubert, 1979

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionID: FDGC; occurrenceID: 5F7C4D17-A9DE-514A-8156-912E53A895B7

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Herpestomus* Wesmael, 1845

Herpestomus arridens (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 90D6F070-7D56-56DB-930F-0EE007E51733

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995) and Sicily (Turrisi et al. 2007).

Genus *Misetus* Wesmael, 1845

Misetus obscurus Berthoumieu, 1897 stat. rev.

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 4; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: E. Diller; dateIdentified: 2024; institutionCode: FDGC; occurrenceID: 68D20C7A-8527-53E4-A2C5-DBB7EAF25FE8

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: E. Diller; dateIdentified: 2024; institutionCode: FDGC; occurrenceID: A0AAA00E-9BEA-5FAF-8B24-F8C09E14E57C

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: E. Diller; dateIdentified: 2024; institutionCode: FDGC; occurrenceID: 9B3ADB04-2D4B-5AEF-95A9-E91B6203414C

Diagnosis: Re-description, *Female* (Fig. 3). Body length 7 mm. Fore wing length 4 mm.

Figure 3. doi

Misetus obscurus Berthoumieu, 1897, female, habitus. Scale bar 1 mm.

Face about 0.5× as high as wide (width between compound eyes at the level of clypeal suture; height from antennal sockets to clypeal suture), polished with few scattered punctures centrally. Frons and vertex polished with very fine punctures. Clypeus polished and shining, with just few inconspicuous punctures, its apical margin almost straight and with a small developed medial tooth. Mandible slightly down-twisted at apex, with upper tooth longer than the lower one. Occipital carina complete, joining hypostomal carina at base of mandible. Antenna with 30 flagellomeres. Mesoscutum with dense punctures, notaulus deeply impressed in the anterior half; scutellum with few inconspicuous punctures, without lateral carinae. Mesopleuron, except for smooth speculum, covered with fine longitudinal striae, with a few distinct punctures interspersed in between; sternaulus impressed in the anterior half of mesopleuron; epicnemial carina present and reaching anterior margin of mesopleuron; posterior transverse carina of mesosternum interrupted at level of middle coxa. Fore wing areolet pentagonal, with cu-a opposite Rs&M. Hind wing with distal abscissa of Cu1 present. Coxa coriaceous and strongly punctate. Propodeum

coriaceous, irregularly wrinkled, with propodeal carinae weakly marked, area superomedia slightly longer than wide; metapleuron smooth in the antero-dorsal half, with few scattered punctures, coriaceous and with irregular wrinkles on postero-ventral half. Metasoma covered with fine, short and sparse pubescence. Tergite I with dorsal longitudinal carinae weak, postpetiole strigose-punctate. Metasomal tergite II with thyridia weakly marked, slightly granulate basally, before thyridia, then slightly coriaceous medially and polished laterally and apically, with very few scattered punctures. Remaining metasomal tergites polished and without punctures; metasomal tergite V emarginate apically. Ovipositor short and upcurved.

Colour. Head black; antenna brownish-black with white markings on flagellomeres 5-9, scape and pedicel ventrally reddish; mandible, except for reddish teeth, yellowish-red; palps yellow. Mesosoma black; hind corner of pronotum, subtegular ridge, tegula and scutellum yellowish. Pterostigma yellowish-brown. Fore and mid-coxae and all trochanters yellow; fore and mid-femora and tibiae red; hind coxa black with yellow apex; trochanters yellow; hind femur black; hind tibia and tarsi reddish, tibia infuscate on apical third. Metasoma reddish-yellow; tergite I black, slightly reddish basally and apically; metasomal tergites II-III with a brownish median band. Ovipositor sheath red.

Male (Fig. 4). As female, except for: antenna with 29-31 flagellomeres, tyloids on flagellar segments 7-15. Metasomal tergite II with thyridia more distinct, tergite roughly granulate basally, before thyridia, then slightly coriaceous medially and subpolished laterally and apically, with very few scattered punctures. In colour, similar to the female, except for mandible and scape brownish-black, scutellum black, hind trochanter black basally, yellow apically, hind tibia and tarsi darker, metasoma black with thyridia on metasomal tergite II and apical margin on tergites II-VI reddish.

Figure 4. doi

Misetus obscurus Berthoumieu, 1897, male, habitus. Scale bar 1 mm.

Distribution: Belgium, France (incl. Corsica), Romania, Sweden (but see Notes). This is the first record of the species for Italy.

Notes: According to Berthoumieu (1897), it is a colour form of *Misetus oculatus* Wesmael, 1845, characterszed by scape brown to black, thorax entirely black, hind coxae and sometimes also fore coxae black, hind legs and abdomen black, the latter with reddish margins on metasomal segments II–III. This form was later reported from Romania by Constantineanu (1965) and from Corsica by Aubert (1969); Constantineanu also cited it from France, Germany, Sweden and Lapland, repeating Berthoumieu's account, although the latter did not differentiate between the distribution of the two forms. Compared to the original description (Berthoumieu 1897), Aubert (1969) reports the scutellum as red and the hind legs as black, except for the yellow trochanters. In the specimens attributed to this form by Constantineanu (1965), the scutellum and postscutellum are black, whereas the hind femora are sometimes reddish-brown. According to Diller and Horstmann (1994), the *obscurus* form corresponds to *var. 1* reported by Wesmael (1845) for Belgium and in Holmgren (1890) for Sweden.

In the key to females of the Palaearctic species of the genus *Misetus* (Di Giovanni et al. 2018), the female of *M. obscurus* runs to the couplet 2, resembling *M. borealis* Kusigemati, 1974 and *M. nordicator* Selfa, 1995 in having a distinctly concave metasomal tergite V (Kusigemati 1974, Selfa and Diller 1995). However, it can be distinguished from both species by the number of flagellomeres (30), the occipital carina meeting the hypostomal carina at the base of the mandibles and the strigose-punctate postpetiole. Compared to the Mediterranean species (Figs 5, 6), *M. obscurus* exhibits a moderately pronounced median tooth on the clypeus (much more prominent in *M. oculatus*, barely visible in *M. strumiai* Di Giovanni, Scaramozzino & Diller, 2018), a distinctive microsculpture of postpetiole and metasomal tergite II, a yellowish scutellum (black in *M. hispanator* Selfa, 1995, red in *M. strumiai*) and a typically brownish-black hind coxa and femora (Selfa and Diller 1995, Di Giovanni et al. 2018).

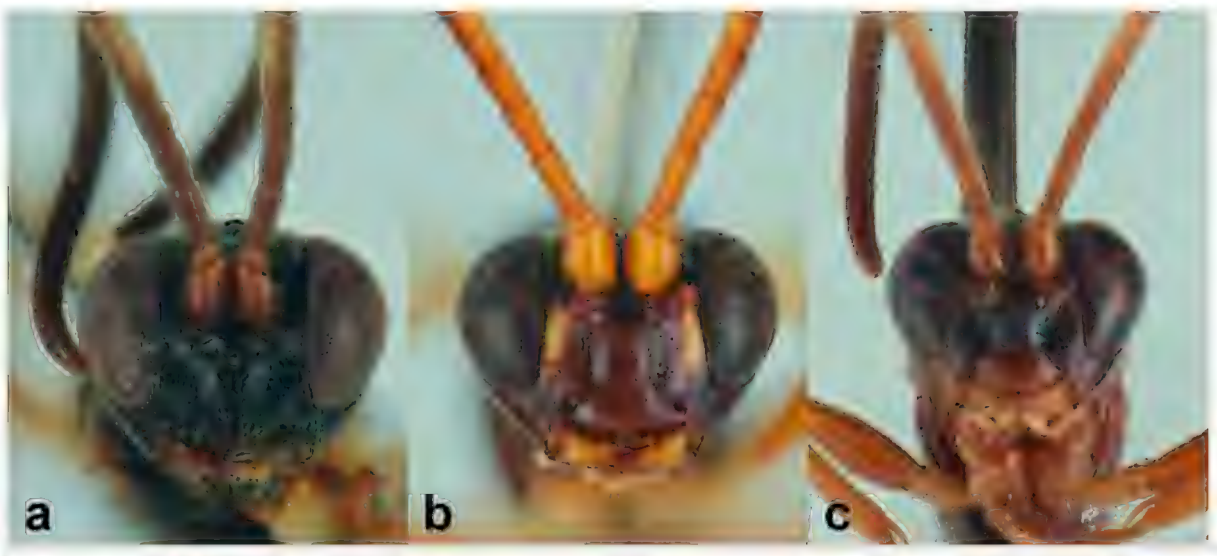

Figure 5. doi

Misetus spp., females, face: **a)** *M. obscurus* Berthoumieu, 1897; **b)** *M. oculatus* Wesmael, 1845; **c)** *M. strumiai* Di Giovanni, Scaramozzino & Diller 2018.

Figure 6. doi

Misetus spp., females, metasomal tergites II: **a)** *M. obscurus* Berthoumieu, 1897; **b)** *M. oculatus* Wesmael, 1845; **c)** *M. strumiai* Di Giovanni, Scaramozzino & Diller 2018.

Males are more difficult to distinguish and resemble *M. strumiai* males in colouration; they differ, however, by a more pronounced median tooth on the clypeus, antennae with a higher number of flagellomeres and tyloids (29-31 flagellomeres in *M. obscurus* vs. 24-25 in *M. strumiai*), less marked punctation on face, clypeus and metasomal tergite II and by the colouration of scutellum (black in males of *M. obscurus* and red in *M. strumiai*) (Di Giovanni et al. 2020) (Figs 7, 8).

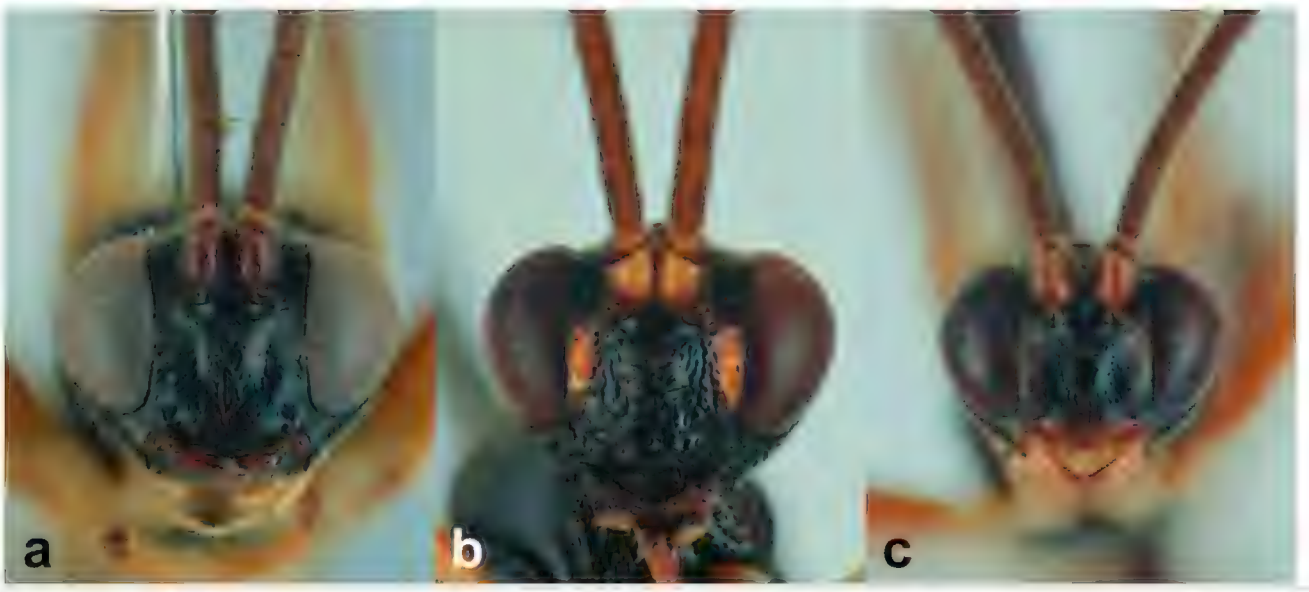

Figure 7. doi

Misetus spp., males, face: **a)** *M. obscurus* Berthoumieu, 1897; **b)** *M. oculatus* Wesmael, 1845; **c)** *M. strumiai* Di Giovanni, Scaramozzino & Diller 2018.

Taxonomic identification was further supported by partial COX1 sequencing (GenBank accession PX272273). The closest matches in both the BOLD Systems v5 species identification and NCBI BLASTn search corresponded to *M. oculatus* (BOLD: GMFIE519-12; GenBank: MZ607881), with a p-distance of 5.41–5.84% (Table 1), indicating that the specimen cannot be confidently assigned to *M. oculatus*.

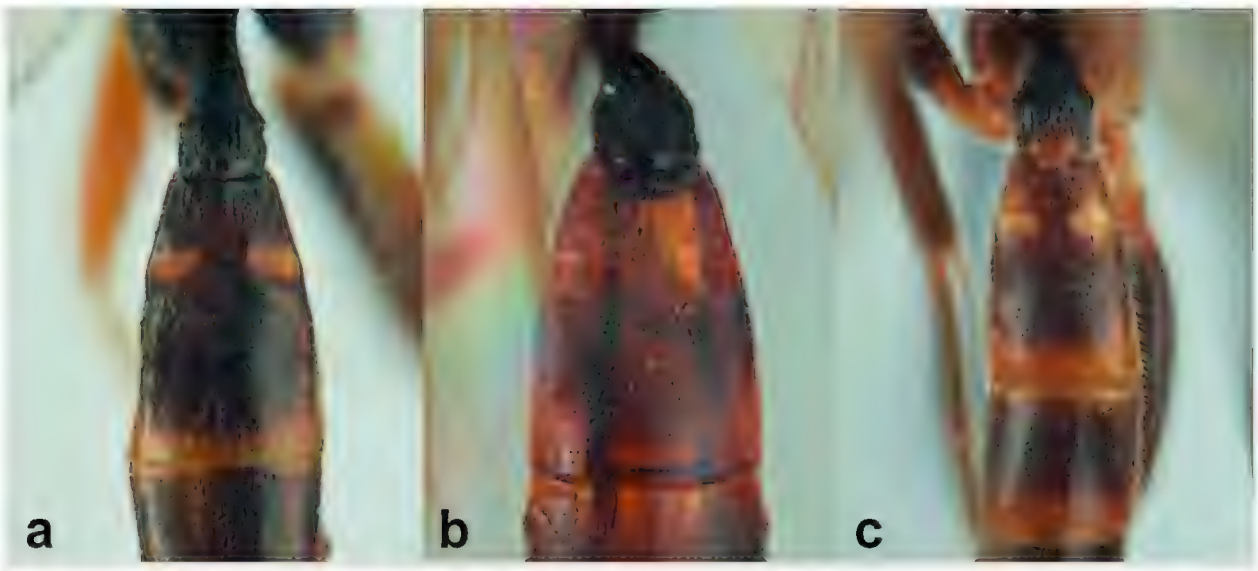

Figure 8. doi

Misetus spp., males, metasomal tergite II: **a)** *M. obscurus* Berthoumieu, 1897; **b)** *M. oculatus* Wesmael, 1845; **c)** *M. strumiai* Di Giovanni, Scaramozzino & Diller 2018.

Table 1.

P-distance values obtained by comparing the newly-deposited *M. obscurus* sequence (PX272273) with the two best hits retrieved from BOLD and NCBI databases.

		P-distance (%)
M. oculatus (GMFIE519-12)	*M. oculatus* (MZ607881)	0.34
M. oculatus (GMFIE519-12)	*M. obscurus* (PX272273, this study)	5.41
M. oculatus (MZ607881)	*M. obscurus* (PX272273, this study)	5.84

Genus *Stenodontus* Berthoumieu, 1897

Stenodontus meridionator Aubert, 1959

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C75B63BD-77FB-5267-A0A8-29CB5F166D21

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: EE6AD95C-0912-5DBA-86E7-321B91C521C4

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 4; sex: 1 female, 3 males; recordedBy: S. Cantone, A. Di Giulio;

identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 315E05A8-62AF-5D43-A63E-E3BF3D00CF59

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for South Italy and Sardinia (Diller 1993, Scaramozzino 1995). This is the first record of the species for Sicily.

Tribe Platylabini Berthoumieu, 1904

Genus *Cyclolabus* Heinrich, 1936

Cyclolabus axillatorius (Thunberg, 1822)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 4; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FGDC; occurrenceID: 2E62E411-242C-5131-93F2-2F9BCC15FD39

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 4; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FGDC; occurrenceID: FB3F98EE-A6C9-59CF-B16A-414CAC9B3720

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Genus *Platylabus* Wesmael, 1845

Platylabus rufator Riedel, 2012

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: CD7066CE-DA59-5ECE-854A-FC384E1511C3

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 5; sex: 4 females, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: E0647D37-5269-50ED-9084-636FDF299AF4

Diagnosis: ***Female*** (Fig. 9). With respect to the original description (Riedel and Tomarchio 2012), antenna with 27-28 flagellomeres, white markings on flagellomeres (7)8-11(12). Face black with only a reddish-yellow spot in the middle or more extensive reddish-yellow colouration, also covering the clypeus and sometimes gena. Usually metasomal tergites I-III red, but sometimes metasomal tergite III brown or metasomal tergite IV almost enterely red. Hind tibia sometimes blackish in the apical 0.3-0.4.

Figure 9. doi

Platylabus rufator Riedel, 2012, female, habitus. Scale bar 1 mm.

Description of the male (Figs 10, 11): Similar to female, but with the following differences: antenna stouter than female, linear, with 29 segments, without tyloids; face, including clypeus, mandibles (except for reddish-brown teeth), inner orbits and spots on outer orbits ivory; scape yellow ventrally; antenna brown, without white markings; mesosoma and metasoma more extensively black, with faint reddish colouration; apical area of propodeum black; hind tibia black in the apical 0.5.

Figure 10. doi

Platylabus rufator Riedel, 2012, male, habitus. Scale bar 1 mm.

Figure 11. doi

Platylabus rufator Riedel, 2012, male, face, frontal view.

Distribution: The species is only known from Sicily (Riedel and Turrisi 2013).

Notes: The species has been described on a single female from Mt. Etna (Riedel and Tomarchio 2012, Riedel and Turrisi 2013). *Platylabus rufator* was described by Riedel and Tomarchio (2012); however, the work has since been retracted. According to the ICZN (1999: Article 8.8), the retraction does not affect the availability of the new name published in the original work. Therefore, the authorship of *P. rufator* remains Riedel, 2012.

Subfamily Mesochorinae Förster, 1869

Genus *Astiphromma* Förster, 1869

Astiphromma italicum Schwenke, 1999

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: DD41D31E-68E0-5C41-ACAB-1A2B512982F1

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Schwenke 1999). This is the first record of the species for Sicily.

Astiphromma splenium (Curtis, 1833)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & M. Riedel; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 57169ADE-532C-580B-9070-594AABF4DA2E

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; samplingProtocol: Malaise trap; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 73336059-2E30-553F-87F0-FCC6C807BCC1

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & M. Riedel; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C83E1823-E325-594D-92CA-77020D96D939

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & M. Riedel; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 3C8E5A9C-762D-5150-B869-93D377D218E0

Distribution: Nearctic; Palaearctic (Eastern Palaearctic, Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Subfamily Metopiinae Förster, 1869

Genus *Exochus* Gravenhorst, 1829

Exochus semilividus van Vollenhoven, 1875

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 47F32E61-560D-5BB2-AF6A-E92961E131E5

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A0BE0B03-87BD-51DC-BD82-CBC9864CCBE0

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: ABA04E05-3A23-557D-A416-280259B6D61D

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic) (Johansson and Astafurova 2025).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Exochus thomsoni Schmiedeknecht, 1924

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5952FC50-C6AE-5ECC-A0B7-F59153500BBF

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 3; sex: 2 females, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: FA48B331-2C25-5A23-A35B-A254B1D6949C

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 83C79768-02C4-5CD8-927C-4147F71BABA6

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 8; day: 21; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 44A145DF-0222-5006-97D0-D652958B1250

Distribution: Palaearctic (Eastern Pelaearctic; Western Palaearctic).

Notes: Species reported for Italy, without regional details (Johansson and Astafurova 2025) and for Sicily as *Exochus humerator* Aubert, 1960 (Scaramozzino 1995).

Genus *Hypsicera* Latreille, 1829

Hypsicera britannica Tolkanitz, 2011

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 1560F494-ED94-52BA-BB29-CA86765D529F

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Family Ophioninae Shuckard, 1840

Genus *Enicospilus* Stephens, 1835

Enicospilus inflexus (Ratzeburg, 1844)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 87305CE9-E143-50EB-94DE-04C7575CB9D2

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North, South Italy and Sicily (Scaramozzino 1995).

Enicospilus marocator Aubert, 1982

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 21/08/2023; year: 2023; month: 8; day: 21; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 01AF9D25-CB92-52B1-B7A3-AC11FD4676ED

Distribution: Palaearctic (Western Palaearctic).

Notes: Species known from Morocco and Spain (Aubert 1982, Izquierdo 1982, Izquierdo 1984). This is the first record of the species for Italy (Fig. 12).

Figure 12. doi

Enicospilus marocator Aubert, 1986, female, habitus. Scale bar 1 mm.

Genus *Ophion* Fabricius, 1798

Ophion castilloae Johansson, 2021

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 1D2F8FFE-869C-5744-B248-24A4E9B36E4E

Distribution: Palaearctic (Western Palaearctic) (Johansson 2021).

Notes: Species described from Andorra, Croatia, Greece, Portugal and Spain (Johansson 2021). This is the first record of the species for Italy (Fig. 13).

Figure 13. doi

Ophion castilloae Johansson, 2021, female, habitus. Scale bar 1 mm.

Ophion longigena Thomson, 1888

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 90874DBC-2231-55EE-87D8-09626A94B689

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy and Sardinia (Scaramozzino 1995). This is the first record of the species for Sicily.

Ophion mediterraneus Johansson, 2021

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & N. Johansson; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 8C7B1570-EED4-5108-B3EC-C59B257E2AB0

Distribution: Palaearctic (Western Palaearctic) (Johansson 2021).

Notes: Species described from Andorra, Morocco and Spain (Johansson 2021). This is the first record of the species for Italy (Fig. 14).

Figure 14. doi

Ophion mediterraneus Johansson, 2021, male, habitus. Scale bar 1 mm.

Ophion mocsaryi Brauns, 1889

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 4151044D-59C4-55CA-83FB-63E35E5AAAC9

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North, South Italy and Sardinia (Scaramozzino 1995). This is the first record of the species for Sicily.

Subfamily Orthocentrinae Förster, 1869

Genus *Helictes* Haliday, 1837

Helictes borealis (Holmgren, 1857)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: EC36F746-A938-58E3-8D9E-BA9DA4561FAA

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Helictes meridionator Aubert, 1961

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: B899AF4C-368E-5B18-ABCC-C6FA428B44CD

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 0936ACCD-63D1-582D-8E15-A09699256CB3

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: CB2B8DD9-7317-545D-B97F-D6C96E81DC82

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for France (incl. Corsica), Kazakhstan and Russia (Aubert 1961, Aubert 1963, Humala 2007). This is the first record of the species for Italy (Fig. 15).

Figure 15. doi

Helictes meridionator Aubert, 1961, male, habitus. Scale bar 1 mm.

Genus *Orthocentrus* Gravenhorst, 182

Orthocentrus asper (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 8E5F6D11-BAE7-58AE-B3BB-B841B0689197

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 1; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: FFE80D11-25D7-5DB1-B5E4-F30277B23851

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Orthocentrus fulvipes Gravenhorst, 1829

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 709DB177-2EC4-504B-B63C-D2B1EC248240

Distribution: Indomalayan; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995; misidentified as *O. strigatus* Holmgren, 1858 in Corcos et al. (2017) and Di Giovanni and Scaramozzino (2019)). This is the first record of the species for Sicily.

Orthocentrus protervus Holmgren, 1858

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: O. Varga; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 07EED37A-F953-5F16-919C-3857114A3020

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: This is the first record of the species for Italy (Figs 16, 17).

Figure 16. doi

Orthocentrus protervus Holmgren, 1858, female, habitus. Scale bar 0.5 mm.

Figure 17. doi

Orthocentrus protervus Holmgren, 1858, male, habitus. Scale bar 0.5 mm.

Subfamily Oxytorinae Thomson, 1883

Genus *Oxytorus* Förster, 1869

Oxytorus armatus Thomson, 1883

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 26FAACD8-3A66-5817-B911-888228B31BC9

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 912668FA-A7B9-5B25-94DB-1EC7B023ABA7

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded from North and South Italy (Scaramozzino 1995, Corcos et al. 2017). This is the first record of the subfamily Oxytorinae and the species for Sicily.

Oxytorus luridator (Gravenhorst, 1820)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 4; sex: 2 female, 2 males; recordedBy: S. Cantone, A. Di Giulio;

identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 617621A6-E699-5CB3-AAE6-0C461618AD34

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 24; sex: 1 females, 23 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: DD37A48C-6491-5EBB-828F-A0D328756BDE

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 6A3109F1-070A-55BA-BB12-370BE9ECC459

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Pagliano 2009). This is the first record of the subfamily Oxytorinae and the species for Sicily.

Subfamily Phygadeuontinae Förster, 1869

Genus *Bathythrix* Förster, 1869

Bathythrix lamina (Thomson, 1884)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/05/2023; year: 2023; month: 4; day: 2; individualCount: 2; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 30BD1F35-547C-56BA-B298-A053DFDF2886

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 43C9FB59-E4C9-58A9-A2F4-9B4659F0C31A

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Dichrogaster* Doumerc, 1855

Dichrogaster aestivalis (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 04; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A749CC6C-8982-5A5E-955B-D96DEDAECDA0

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 05; day: 17; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5C96B853-605C-5FC9-B0A6-598A04A0DB8A

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 06; day: 17; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5AC367DC-B76C-54C2-92B3-6A1BA6ED05F9

d. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 08; day: 09; individualCount: 3; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 0BC9C135-3EF5-5F1F-93E8-DF66D24A9AA5

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Generani et al. 2000).

Genus *Isadelphus* Förster, 1869

Isadelphus armatus (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A4D33AD3-555E-501C-8800-81E1F04B5DBC

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 4; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: FFCCADF8-C67D-50B9-9F63-5911E0ACA356

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 05E45CD6-912E-54D2-8962-133FAC0E3EB5

Distribution: Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Platyrhabdus* Townes, 1970

Platyrhabdus inflatus (Thomson, 1884)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F59F4C5D-7AA1-55D9-B1FF-D5188F41ECA2

Distribution: Palaearctic (Western Palaearctic).

Notes: This is the first record of the species for Italy (Fig. 18).

Figure 18. doi

Platyrhabdus inflatus (Thomson, 1884), female, habitus. Scale bar 1 mm.

Subfamily Pimplinae Wesmael, 1845

Tribe Delomeristini Hellén, 1915

Genus *Perithous* Holmgren, 1859

Perithous scurra (Panzer, 1806)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 3FDD928E-2085-515C-8030-541999422DA8

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Perithous septemcinctorius (Thunberg, 1822)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: A6E6C007-4F46-5F34-840C-328C2C88353F

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy (Scaramozzino 1995) and Sicily (Zwakhals and Turrisi 2014).

Tribe Ephialtini Hellén, 1915

Genus *Clistopyga* Gravenhorst, 1829

Clistopyga incitator (Fabricius, 1793)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di

Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: DB274CAE-0F46-5DFD-B668-1154227F1B41

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C572E443-9686-5382-8A7F-4A58753D5E04

Distribution: Afrotropical; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Zwakhals and Turrisi 2014, Korenko and Di Giovanni 2019).

Genus *Liotryphon* Ashmead, 1900

Liotryphon crassiseta (Thomson, 1877)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: ADA7D3FA-6E7D-5DE9-B0EC-7D8685CAB70B

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 1E184EF6-F7B7-5D8C-A4D9-063C64A3236A

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Genus *Scambus* Hartig, 1838

Scambus nigricans (Thomson, 1877)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 678296C8-DA9C-5F10-9791-51CCD50795D6

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di

Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: AC5BFCD1-7A66-5871-8AE6-EC997C7EBE0D

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995, Pagliano 2009, Zwakhals and Turrisi 2014).

Genus *Tromatobia* Förster, 1869

Tromatobia ovivora (Boheman, 1821)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 2C7DBB1C-BE44-569E-8524-BD0C4811447C

Distribution: Australasian; Nearctic; Neotropical; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North Italy and Sicily (Scaramozzino 1995).

Genus *Zaglyptus* Förster, 1869

Zaglyptus multicolor (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 38968182-5C25-561F-A879-0766F3A4AEB6

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 3; sex: females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: C9BFC768-0902-57AB-A6EE-8A67D167D4BF

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 12/08/2023; year: 2023; month: 8; day: 12; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9C4C723D-E719-57A5-B755-42C538E0951E

Distribution: Indomalayan; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995) and Sicily (De Stefani 1895, Zwakhals and Turrisi 2014, Korenko and Di Giovanni 2019).

Tribe Pimplini Wesmael, 1845

Genus *Itoplectis* Förster, 1869

Itoplectis maculator (Fabricius, 1775)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 3; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 70A910B3-F182-5895-BD43-8BB442D92906

Distribution: Nearctic; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Genus *Pimpla* Fabricius, 1804

Pimpla contemplator (Müller, 1776)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 160F4E6C-1170-50AB-88A3-69C993DB8450

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995) and Sicily (Zwakhals and Turrisi 2014).

Pimpla rufipes (Miller, 1759)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: B2D09203-6F3C-563D-BD00-6D8CE2701616

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: EE1E56B9-714C-5AC6-86A1-1751B4F65787

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 54BD8027-5068-5808-8C7C-6070BD70E778

Distribution: Australasian; Indomalayan; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species present throughout Italy, including the major islands (Scaramozzino 1995).

Pimpla spuria Gravenhorst, 1829

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 26; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5F95C430-0279-5435-B8CA-82643A6274DF

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 2; sex: 2 females; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 6BAB8E81-D1E8-5FA9-A0C7-AD200CE6EA37

c. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/05/2023; year: 2023; month: 5; day: 17; individualCount: 3; sex: 1 female, 2 males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: BC3B0255-8ECA-5F0C-954E-6925E8F0717F

Distribution: Indomalayan; Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North, South Italy and Sicily (Scaramozzino 1995).

Subfamily Poemeniinae Narayanan & Lal, 1953

Genus *Podoschistus* Townes, 1957

Podoschistus scutellaris (Desvignes, 1856)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 09/07/2023; year: 2023; month: 7; day: 9; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9A20249B-2C96-5380-8FAD-9104FDB0E7AB

Distribution: Indomalayan; Palaearctic (Western Palaearctic).

Notes: Species recorded for North Italy (Pagliano 2009, Di Giovanni et al. 2015) and Sardinia (Di Giovanni and Reshchikov 2016). This is the first record of the species for Sicily.

Subfamily Stilbopinae Townes & Townes, 1949

Genus *Stilbops* Förster, 1869

Stilbops (*Stilbops*) *vetulus* (Gravenhorst, 1829)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 8DC24893-5CE0-54BD-940F-8CFB7D414964

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Corcos et al. 2017). This is the first record of the species for Sicily.

Subfamily Tryphoninae Shuckard, 1840

Tribe Oedemopsini Woldstedt, 1877

Genus *Thymaris* Förster, 1869

Thymaris niger (Taschenberg, 1865)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni & G. Broad; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F47EEB85-9C0D-5007-B0C4-10B314F3EFEB

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Tribe " Exenterini" Förster, 1869

Genus *Acrotomus* Holmgren, 1857

Acrotomus lucidulus (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: males; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 8F3EE31E-AA27-596C-B7A0-2BB6328847CC

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: F25684B5-471B-54A2-A77A-CEE747241430

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Scaramozzino 1995, Pagliano 2009). This is the first record of the species for Sicily.

Genus *Cycasis* Townes, 1965

Cycasis rubiginosa (Gravenhorst, 1829)

Materials

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 1; sex: male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 758B23B5-61A8-5EE9-847C-3134278CBC59

b. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 05/05/2023; year: 2023; month: 5; day: 5; individualCount: 1; sex: female; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 9A005770-3337-5AFF-AA78-87B41C2E5F23

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species originally described from South Italy (Tuscany) (Gravenhorst 1829), recorded also from North Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Tribe Tryphonini Shuckard, 1840

Genus *Ctenochira* Förster, 1855

Ctenochira genalis (Thomson, 1883)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 27/04/2023; year: 2023; month: 4; day: 27; individualCount: 2; sex: 1 female, 1 male; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: EB217F8B-10F4-5AC4-9E85-E01DC80BFF04

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic).

Notes: Species recorded for North and South Italy (Di Giovanni and Reshchikov 2016). This is the first record of the species for Sicily.

Subfamily Xoridinae Shuckard, 1840

Genus *Xorides* Latreille, 1809

Xorides praecatorius (Fabricius, 1793)

Material

a. country: Italy; countryCode: IT; stateProvince: Sicily; municipality: Sortino, Siracusa; locality: Riserva Naturale di Pantalica; eventDate: 17/06/2023; year: 2023; month: 6; day: 17; individualCount: 1; sex: femal; recordedBy: S. Cantone, A. Di Giulio; identifiedBy: F. Di Giovanni; dateIdentified: 2025; institutionCode: FDGC; occurrenceID: 5FF39678-A7A7-5F04-9C9E-6C8E3BFA3862

Distribution: Palaearctic (Eastern Palaearctic; Western Palaearctic)

Notes: Species recorded for North and South Italy (Scaramozzino 1995). This is the first record of the species for Sicily.

Discussion

Based on the data from the previous checklist of Ichneumonidae (Scaramozzino 1995), Sicily appears to be one of the Italian regions with the highest diversity, ranking after northern regions, such as Piedmont, Trentino-Alto Adige and Emilia-Romagna (Di Giovanni & Dal Pos, unpublished data). This is partly a result of the checklist of the Italian fauna treating Sicily and Sardinia as distinct biogeographic units (Minelli et al. 1995).

However, this paper reveals that significant gaps remain in our understanding of the distribution of these insects on the island. Most of the available data originate from very old and outdated sources, such as De Stefani (1895) and for some subfamilies — for example, Ctenopelmatinae, Mesochorinae, Orthocentrinae — the data included in the 1995 checklist are essentially absent. Conversely, the groups for which information is more complete are those that have received renewed attention in recent years, such as Diplazontinae, Ichneumoninae and Pimplinae (Turrisi et al. 2007, Riedel and Turrisi 2013 , Zwakhals and Turrisi 2014).

These findings highlight how significantly the true diversity of this group of parasitoid Hymenoptera in Italy remains underestimated and underscore the need to fill current gaps in faunistic knowledge of several animal taxa in the country, particularly those with a Mediterranean-centred distribution.

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